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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Notice of Availability of Interim Strategy on section 7 consultations under the Endangered Species Act for watercraft access projects in Florida that may indirectly affect the West Indian manatee

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of document availability and public comment period.

SUMMARY: We, the Fish and Wildlife Service, announce the availability of an interim strategy to comply with the provisions of the Endangered Species Act of 1973, as amended (ESA), on actions resulting in increased watercraft access in Florida. This document reflects the Service's findings on the conditions under which the Service could determine that a proposed watercraft access facility is unlikely to have adverse indirect effects on manatees as well as the measures that an individual seeking permission to build a watercraft access facility could take to reduce indirect effects on manatees to an unlikely to These conditions and measures were developed using occur level. the best scientific and commercial data available. consultation also requires that the Service make determinations on the effect of a Federal action based on the "best scientific and commercial data available." Thus, during the time this guidance is available for public comment, the Service will continue to fulfill its section 7 consultation responsibilities based on the principles stated in this guidance. principles may change as information is received through the public comment process, if new or more detailed information is brought to the attention of the Service.

This interim strategy represents the Service's guidance to all persons, including individuals, local governments, State

agencies, and Federal agencies regarding voluntary conservation measures that could be incorporated into watercraft access facility designs such that, in some cases projects would not likely cause incidental take of the West Indian manatee (Trichechus manatus). Watercraft access facilities including slips, ramps, launches, dry storage facilities, docks, moorings, marina developments, and similar structures will be evaluated on a case-by-case basis to determine whether, in any particular situation, the proposed project is likely to adversely affect manatees or, rather, whether specific conditions in the project area as well as measures incorporated into the project's design are such that the Service can reasonably conclude that the project is not likely to adversely affect manatees. called this strategy an "interim" strategy because it is designed to provide guidance relating to the indirect effects of watercraft access development on manatees only during the time period while incidental take regulations under the Marine Mammal Protection Act (MMPA) are being promulgated.

Using this guidance, the individuals, local governments, State agencies, and Federal agencies may develop acceptable manatee conservation measures which are then reviewed by the Service for compliance with the provisions of the ESA. The Service believes that, during this interim period, some watercraft access projects can be designed so that there is no increased likelihood of manatee mortalities and injuries as a result of collisions with watercraft.

This guidance document does not authorize incidental take of manatees. Incidental take of manatees without authorization is unlawful and such authorization cannot occur until the Service issues appropriate regulations under the MMPA. In addition, this guidance document does not describe all procedures and standards that will be followed during formal and informal consultation. All determinations made during informal and formal consultation will be made in accordance with the ESA, and the Service's March 1998 Endangered Species Consultation Handbook.

It is also important to stress that this guidance document does not address all of the ways in which a watercraft access project

could have indirect effects which constitute an incidental take of manatees as defined by the ESA and MMPA. Instead, this guidance document focuses on one particular form of potential incidental take, i.e., the increased likelihood of manatee mortalities and injuries as a result of collisions with watercraft. In determining whether to concur with a not likely to adversely affect determination, or in issuing a biological opinion addressing the potential for incidental take, the Service must consider all potential forms of incidental take, including whether the direct or indirect effects of the project would be likely to "harass" or "harm" manatees as defined by the ESA and its implementing regulations.

DATES: We must receive your comments regarding this proposed rulemaking on or before (INSERT DATE THAT IS 60 DAYS FROM PUBLICATION)

ADDRESSES: Submit written comments to the Field Supervisor, South Florida Ecological Services Office, U.S. Fish and Wildlife Service, 1339 20th Street, Vero Beach, Florida 32961-2676 or via electronic mail to verobeach@fws.gov. Comments and materials received in response to this proposal will be available for public inspection at this address during normal working hours from 8 a.m. to 4:30 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT: Marilyn Stoll, South Florida Ecological Services Office, P.O. Box 2676, Vero Beach, Florida 32961-2676, Telephone: (561) 562-3909 extension 229, Facsimile: (561) 562-4288, or Electronic Mail: verobeach@fws.gov.

SUPPLEMENTARY INFORMATION:

PURPOSE

This document reflects the Service's findings on the conditions under which the Service could conclude that a proposed watercraft access facility is unlikely to cause a "take" of manatees, as defined in the Endangered Species Act §3(18) and 50 CFR §17.3, as well as the measures that an individual seeking permission to build a watercraft access facility could incorporate into the design of a project in order to reduce the likelihood of

incidental take to a level of not likely to occur. These conditions and measures were developed using the best scientific and commercial data available. Because section 7 consultation also requires the Service to make determinations on the effect of a Federal action based on the best scientific and commercial data available, the Service will use the guidelines described in this document to fulfill its section 7 consultation responsibilities during the time this guidance is available for public comment. These guidelines may change as information is received through the public comment process, if new or more detailed information is brought to the attention of the Service.

BACKGROUND

The West Indian manatee (*Trichechus manatus*) was first provided Federal protection in 1967 through its listing as an endangered species under the Endangered Species Preservation Act of 1966. The manatee continued to be listed as an endangered species under the Endangered Species Conservation Act of 1969 and the Endangered Species Act of 1973, as amended (ESA). Additional Federal protection was provided through the Marine Mammal Protection Act (MMPA) of 1972.

Watercraft-related manatee mortality and increasing mortality trends have been documented since collection of manatee mortality data began in 1974. The addition of new watercraft into Florida's waters has the potential to adversely affect manatees. The Service is presently preparing MMPA regulations regarding the circumstances under which the incidental take of manatees associated with watercraft access facilities may be authorized. The principle purpose of this guidance document is to provide assistance in determining appropriate measures for eliminating any project-related adverse effects from watercraft collisions to manatees, and to guide the Service in evaluating requests for letters of concurrence, requests for initiation of consultation, and during formal consultation to identify measures which eliminate the risk of incidental take of manatees. specifically, one purpose of this guidance document is to set forth the conditions under which the Service could make a determination that incidental take, as a result of watercraft

collisions, is unlikely to occur so that particular project could proceed prior to the issuance of MMPA rules. Watercraft access facilities are defined as marinas, ramps, launches, slips, docks, dry storage facilities, moorings, and similar structures.

Under section 7 of the ESA and its implementing regulations, if a Federal action agency determines that a project is not likely to adversely affect a listed species, the action agency must obtain the Service's written concurrence regarding that determination [see 50 CFR 402.14(b)]. If a Federal action agency makes an initial determination that a proposed project is likely to adversely affect manatees, the action agency must request the Service to initiate formal consultation unless the Service and the action agency subsequently agree during informal consultation that the project is not likely to have any adverse effects on Once formal consultation is initiated, except as provided for in 50 CFR 402.14(1), the Service must render a biological opinion on whether the Federal action is likely to jeopardize any listed species or is likely to adversely modify designated critical habitat. In addition, the Service must anticipate any incidental take that may occur as a result of the action. If the Service does not anticipate that the action will result in incidental take, then the Service must make a clear statement to that effect in the biological opinion. Service does anticipate that incidental take may occur as a result of the action, it must determine whether that incidental take is likely to jeopardize the continued existence of the If not, then the Service must exempt such incidental take, provided the incidental take is otherwise lawful. all marine mammals are also protected by the MMPA, the Service cannot exempt incidental take for manatees under ESA, unless incidental take regulations are promulgated under MMPA. Service to promulgate incidental take regulations under the MMPA, an entity must request that the Service prepare incidental take regulations under the MMPA. For such projects which the Service determines will not result in jeopardy or adverse modification of critical habitat, yet in the Service's opinion is likely to result in the incidental take of manatees, the Service intends to exercise its authority under the ESA to issue biological opinions that make clear that the project may contribute to incidental

take of manatees, and incidental take may not be exempted in the absence of MMPA incidental take regulations.

Direct effects of watercraft access facilities on manatees and essential features of manatee habitat (such as seagrasses), including those arising from the location, design, and construction of facilities, and dredging and filling, will be addressed at the time of the Service's review of the permit application and are not the focus of this interim strategy. analyzing such effects, including those on seagrasses and other important features of manatee habitat, we will analyze the extent to which such effects are addressed by local Manatee Protection Plans, State review, and other protective conservation measures, such as standard construction precautions to protect manatees during construction. Standard construction conditions have been used throughout the range of the manatee for more than a decade and have proven to reduce the effects to manatees within the facility footprint.

This interim strategy is not designed as a means to allow projects to circumvent formal consultation under section 7 of the ESA, which is required whenever a project is likely to adversely affect a federally-listed species or its critical habitat. recognize that, in some cases, the incorporation of conservation measures into project designs will not reduce the potential for indirect effects to an unlikely to occur level. For example, conservation measures as described in this document may not be enough to reduce incidental take of manatees to an unlikely to occur level in a case where a new watercraft access project is proposed in an area that supports large concentrations of manatees which is already experiencing high watercraft-related manatee injury and mortality. However, we believe that in some cases, because of conditions in a particular area and because of conservation measures incorporated into a project's design, the Service will be able to determine that incidental take is not likely to occur.

The Service believes that increased manatee speed zone enforcement is the primary conservation measure through which proposed projects could reduce the incidental take associated

with watercraft collisions to an unlikely to occur level. believe that in some areas additional law enforcement can be increased to a level which would ensure that an increase in watercraft traffic from a proposed facility will not likely result in incidental take of manatees due to watercraft Additionally, this increase in law enforcement would provide added benefits to the manatees by ensuring that those watercraft already on the water would also obey the speed zones currently in place. In some situations and locations, other conservation measures besides increased law enforcement may possibly be employed to address the indirect effects of watercraft access projects on manatees. Such other methods could include designating manatee speed zones, improving the signage of existing speed zones, providing law enforcement equipment, or other measures committed to in an agreement or plan that the Federal action agency and the Service believe reduces the potential for incidental take from increased watercraft traffic to an unlikely to occur level. In order for the Service to determine that any such measure is sufficient to reduce the likelihood of incidental take associated with the project, the Service must first find that: (1) adequate speed zones exist in the areas reasonably anticipated to have increased watercraft traffic as a result of the project; (2) signage in these areas is adequate to ensure that boaters are aware of the speed zones; (3) speed zone enforcement in these areas is, or with project conservation measures will be, sufficient to prevent watercraft collisions from occurring as a result of the project; and (4) these measures must be in place prior to project implementation.

We believe that the conditions and conservation measures addressed in this interim strategy are essential to ensuring that new watercraft access projects do not result in additional watercraft-related mortality or injury to manatees. However, they are only part of the total recovery needs of the manatee. Numerous conservation activities are ongoing to recover the manatee, such as implementation of the recovery plan and any subsequent modifications, development of incidental take regulations under the MMPA, review of federally-designated manatee sanctuaries and refuges, adjustment of speed zone locations, assessment of deregulation of power plants as warm

water refugia, and assessment of the effectiveness of law enforcement and public awareness efforts in decreasing or eliminating watercraft-related manatee mortality.

None of these activities alone can address the multiple actions necessary to recover the species. This interim strategy is a very important component of the overall recovery effort, but is designed to be in place only during the time prior to implementation of comprehensive incidental take regulations promulgated under the MMPA. Recovery of the manatee in Florida depends on numerous factors. We recognize that many of these factors (e.g., red tide events) are difficult, if not impossible, to control. Other factors related to recovery will take many partners and years to address. Watercraft mortality is the most significant factor that we can effectively address at this time to aid in manatee recovery.

Recent research indicates that improving adult survival is the most effective way to ensure the long-term survival of the manatee. Since the Florida Fish and Wildlife Conservation Commission (formerly the Florida Department of Environmental Protection) began a carcass recovery program in 1974, about one-third of the documented manatee mortality has been human-related, and watercraft-related mortalities account for about 80 percent of this total. In Florida in 1999, there were 268 documented manatee deaths of which 82 were watercraft-related, the highest number of watercraft-related mortalities recorded for a single year. In addition, a high proportion of the existing manatee population is scarred from one or more collisions with watercraft.

SPEED ZONE ENFORCEMENT AND BOATER COMPLIANCE

With more than 830,000 vessels registered by the State of Florida and an estimated 400,000 out-of-state vessels, more than one million watercraft use Florida's waterways annually, and the popularity of watercraft recreation continues to grow. While every new watercraft access facility may not directly equate to a watercraft added to the water, cumulatively, the addition of watercraft access points results in increased watercraft use and,

in some cases, changes in watercraft travel patterns and modification of manatee behavior Watercraft speed zones were established in some coastal Florida counties with high manatee-watercraft collision rates to slow watercraft to reduce collisions. When manatees detect the presence of an oncoming watercraft, they dive and/or swim rapidly to try to get out of its path. Their ability to effectively elude the oncoming watercraft is largely determined by the speed of the approaching watercraft. Given ample time, manatees are able to avoid lethal or injurious encounters with watercraft. Therefore, slow-moving watercraft are less of a threat to manatees.

To date, several compliance studies have been conducted to measure the extent to which boaters comply with manatee protection zones (Gorzelany 1996, Gorzelany 1998, Kinnaird 1983, Morris 1994, Tyson 1999). These studies were conducted in Brevard, Lee, and Sarasota counties and demonstrated compliance rates ranging from 50.9 percent to 78.65 percent within the study Three of the studies concluded that the presence of law enforcement officers on the water during the sampling period The fourth researcher concluded increased levels of compliance. that low levels of enforcement, few citations issued, and poor signage were responsible for poor compliance (Morris 1994). Gorzelany (1996) demonstrated that areas with a frequent enforcement presence had the highest level of boater compliance. Tyson (1999) concluded that compliance was best when law enforcement officers were on the water and that consistent law enforcement presence will result in consistent compliance.

In many areas, watercraft operator compliance with speed zones is currently inadequate to prevent manatee injuries and deaths. Compliance may be inadequate due to insufficient signs in the speed zone or insufficient enforcement of the speed within the zone. In other areas, speed zones have not yet been established. From 1997 through 1999, Service law enforcement operations resulted in more than 1,348 watercraft speed zone citations over 18 weekends, demonstrating the need for increased speed zone awareness and compliance. With regard to some projects, we believe that increased enforcement in the area likely to be

affected by watercraft associated with the project should reduce to an unlikely to occur level any potential manatee incidental take that would result from speed zone violations by boaters using that facility. We also believe that, in some areas, means other than increasing law enforcement hours on the water may be sufficient to reduce to an unlikely to occur level any potential incidental take of manatees due to collisions with watercraft. For example, when speed zones are adopted and are adequately enforced, other factors such as the lack of specific equipment, training, etc., may impede law enforcement efforts and efficiency to the extent that there is still a high potential for manatee incidental take resulting from the increased watercraft traffic associated with the project.

INTERIM STRATEGY

This interim strategy applies to any new watercraft access activity that could result in adverse effects on manatees. Specific manatee conservation measures proposed as part of a project must be found to reduce to an unlikely to occur level any adverse effects associated with increased access. Speci fi c conservation measures proposed for any project must be based on a biological evaluation submitted by the applicant or the action This biological evaluation must include a description of the proposed action; a description of manatee habitat and any manatee critical habitat affected by the proposed action; a thorough analysis of the effects of the proposed action on manatees, manatee habitat, and manatee critical habitat. this biological evaluation, individuals, local governments, State agencies, and Federal agencies can develop acceptable manatee conservation measures(s). Once the measures have been developed, the Service can review and provide additional advice as necessary to ensure that the proposed project will reduce the potential for watercraft collisions to an unlikely to occur level. The action agency will provide a copy of these guidelines to the applicant for use in designing their proposed action to comply with the provisions of the ESA. The action agency will provide a letter to the Service with a complete project description, including any conservation measures, and request that the Service review the

proposed action for compliance with the ESA. The specific conservation measures necessary in any given situation will vary.

Because necessary conservation measures will vary according to mortality risk in the area of the proposed project, the Service delineated relative risk areas throughout Florida. We assessed regional manatee populations, manatee ecology, and historic watercraft-related manatee mortality to determine relative risk of watercraft-related manatee losses, and identified eight risk regions. We examined manatee mortality data from 1974 through 2000, including five-year mortality increments and watercraft-related mortality trends, to determine high, medium and low risk areas (Table 1).

We defined high risk areas as those averaging one or more watercraft-related manatee mortalities per year during the past ten years; medium risk areas averaged less than one, but more than zero, watercraft-related manatee mortality per year; and low risk (the remainder of the manatee's range in the southeastern U.S.) had no documented watercraft-related mortality.

The Service believes that watercraft access developments in high risk areas should incorporate measures for increased enforcement of watercraft speed zones designated for manatee protection. Generally, the increased enforcement should be in the form of providing for increased hours of enforcement officer presence on the water. For example, an applicant could provide for enforcement hours if there are adequate speed zones with the appropriate signage. In some limited cases, where the Service finds, based on the best scientific and commercial data available, that factors other than hours on the water limit the effectiveness of enforcement agencies, alternate means of increasing enforcement might be acceptable as conservation Such alternatives might include providing to a law enforcement entity equipment that is needed to increase manatee law enforcement efforts (e.g., watercraft, signs), or providing to law enforcement officials training which includes manatee biology, management, laws, regulations, techniques, and problem As an example, an applicant could, in cooperation with the appropriate entities, identify the locations of manatee speed

zones and have them posted with the appropriate signage, if the level of law enforcement is adequate. Applicants have the option to provide these conservation measures through an agreement with a law enforcement entity or through contributions to a conservation fund. In some cases in high risk areas, an applicant may choose to also include an education or outreach component as a conservation measure, in addition to increased enforcement, but education will not be sufficient to replace enforcement as a conservation measure.

Table 1. High, medium and low risk areas by Region and by County in Florida.

High Risk Area		Medium Risk Area		Low Risk Area	
Regi on	County	Regi on	County	Regi on	County/State
Southwest Florida	Collier	Other Peni nsul ar Fl ori da	St. Luci e	Other Florida Counties	DeSoto
	Lee		Glades		0keechobee
	Charlotte		Nassau		Jefferson
West Central Flori da	Sarasota		Cl ay*		Escambi a
	Manatee		Putnam		Frankl i n
	Hillsborou		Fl agl er		Gul f
	gh		St.		Bay
Northwest Florida	Citrus		Lake		Walton
			Semi nol e		0kal oosa
Southeast Florida	Monroe		Vol usi a*		Santa Rosa
	Mi ami - Dade		Tayl or		!
	Broward		Di xi e		
	Palm Beach		Levy		
East Central Flori da	Martin		Hernando		
	I ndi an Ri ver		Hendry		
Northeast Fl ori da	Brevard		Pasco		
	St. Johns*		Pinellas	 -	
	Cl ay*		Wakul l a		
	Vol usi a*				
	Duval *				

^{*} In Northeast Florida, the portions of the St. Johns River north (downstream) of a line drawn across the river at the Shands Bridge (State Route 16) in St. Johns County are included with the high risk area of Duval County. The J. Turner Butler (Sollee) Bridge (State Route 202) across the Atlantic Intracoastal Waterway in southeast Duval County is the demarcation between the high risk area to the north of the bridge and the medium risk area to the south. The Nassau River and its tributaries in Duval County are medium risk areas. The coastal waterways of Volusia County (including the Tomoka River) are in the high risk category, and the St. Johns River in Volusia, Lake and Seminole Counties are in the medium risk category.

In some medium risk counties, manatee mortality trends have been increasing and the Service believes that increasing enforcement hours on the water will be the most appropriate conservation measure. In other medium risk counties where mortality is low and is not increasing, law enforcement may be increased and/or

alternate conservation measures may be used as deemed appropriate, based on the best scientific and commercial data available, to reduce incidental take to an unlikely to occur level.

For all projects in high and medium risk counties, the Service will evaluate the specific conditions in the area expected to be affected by the project as well as the conservation measures incorporated into the project's design, in determining whether the project is likely to contribute to incidental take due to watercraft collisions. The basic prerequisites to determining that incidental take from watercraft collisions is unlikely to occur as a result of any particular project are that: adequate speed zones exist in the areas reasonably anticipated to have increased watercraft traffic as a result of the project; (2) signage in these areas is adequate to ensure that boaters are aware of the speed zones; (3) speed zone enforcement in these areas is, or with project conservation measures will be. sufficient to prevent watercraft collisions from occurring as a result of the project; and (4) these measures must be in place or will be in place prior to project implementation. If, for whatever reason, any of these conditions are not, or cannot be, satisfied in a particular area, then the Service cannot conclude that a project is not likely to adversely affect manatees. Service will advise the Federal agency and applicants as to the conservation measures which the Service deems appropriate based on the relative risks of manatee mortalities and injuries in the particular area where the project is located.

With respect to single family docks as an interim measure only, the Service, based on the best scientific and commercial data available, may find that a financial contribution from any applicant to an organization or entity that participates in and/or funds manatee conservation actions is consistent with the principles in these guidelines. In unusual situations -- such as where the Federal agency advises the Service that many project applications for single family docks are pending in an area of particular importance to manatees, or in an area that is already experiencing very high mortality -- the Service may conclude that a financial contribution is not sufficient to render a watercraft

access facility for these types of permit applications unlikely to contribute to the incidental take of manatees.

IMPLEMENTATION OF CONSERVATION MEASURES

In order to effectively address adverse effects to manatees, the Service believes that conservation measures should be built into the project description and be implemented within the area which the Service believes, based on the best scientific and commercial data available, is likely to be affected by the proposed watercraft access project. Currently, the Service has not identified a specific distance from the project as the area likely to be affected. This is because site-specific circumstances, such as watercraft traffic patterns and manatee travel patterns will dictate the affected area from watercraft in Incorporation of conservation measures into a project each case. design can be accomplished by having a signed agreement with an entity that has the authority to provide law enforcement, providing funds for law enforcement to an entity that has manatee conservation as a goal, or identifying and implementing an activity that would accomplish the goal of this guidance, i.e., ensuring that the conditions in an area are such that the project does not contribute to the incidental take of manatees through watercraft collisions. In any of these cases, the action agency and/or applicants may develop site-specific enforcement plans, including entering into enforcement agreements, facilitating enforcement events, or contracting that activity through a conservation fund entity. Agents involved in enforcement actions must be authorized to enforce all local, State, and Federal laws, including speed zone restrictions, necessary for the protection of manatees.

For commercial watercraft access projects and multi-family facilities, contributions should be made and on-the-water enforcement ensured prior to new watercraft being added to the aquatic environment. These enforcement activities will be directed at the appropriate location to ensure that the impacts of the project are not likely to adversely affect the manatee by increasing the risk of mortalities and injuries through watercraft collisions. Generally, these types of complex

projects require more time to resolve resource conflicts and to finalize construction than simpler projects such as single family docks. Permit applicants for commercial and multi-family watercraft access projects may also have access to expertise to complete individual agreements with law enforcement entities. Therefore, enforcement efforts around larger facilities may be more readily accomplished and monitored prior to the time construction is finalized and new watercraft are added to manatee habitat.

If a project is implemented in a manner that is not consistent with the project as consulted on, because conservation measures are not adopted and implemented as proposed, the action agency will reinitiate consultation, in accordance with the Service's Consultation Handbook, to ascertain whether additional conservation measures should be incorporated into the project. Furthermore, failure to implement a project as reviewed and approved by the action agency and the Service, to avoid any incidental take resulting from the project, may subject the permittee to liability pursuant to the underlying statutes. Based on conversations with the Corps, it is the Service's understanding that the Corps will suspend or revoke permits where applicants have implemented projects in a manner that is inconsistent with the project as consulted on with the Service.

Establishing an Agreement Directly with a Law Enforcement Entity

If an applicant elects to establish an agreement or contract directly with an entity that can provide law enforcement, the agreement or contract must be completed before the Service makes a final determination on the proposed project. The entity that provides the law enforcement personnel must be able to provide personnel certified to enforce all local, State, and Federal laws, including speed zone restrictions, necessary for the protection of manatees. Specific details included in the agreement or contract must be based on a biological evaluation which includes a description of the proposed action, manatee habitat, and manatee critical habitat affected by the proposed action; a thorough analysis of effects of the proposed action on

manatees, manatee habitat, and manatee critical habitat; and a detailed and thorough description of the proposed manatee conservation measure(s). The agreement or contract must describe how the funding/in-kind resources will be utilized by the law enforcement entity (e.g., how much the funding/in-kind resources will increase the hours of Marine Patrol Unit operation, the amount of fuel and maintenance of Marine Patrol Units to be supplied, the amount and type of equipment to be supplied) and describe and justify the specific geographic area within which the increased law enforcement will be applied. The agreement or contract must be completed before the Service makes a final determination on the proposed project to ensure that incidental take of the manatee is unlikely to occur after project implementation.

Such an agreement or contract must also specify applicant reporting requirements to the Federal action agency and/or the Specific reporting details must be included in the Such details must include, but are not agreement or contract. limited to: the number of officers provided, the number of officer hours spent on the water enforcing manatee speed zones, the number of on-the-water public contacts (e.g., citations, warnings) made by law enforcement staff, the number of hours and type of training that officers received on law enforcement related to manatees, the types of equipments and material purchased, the amount of funds expended for material and equipment, the amount of administrative overhead required to implement this agreement/contract, the number of manatees observed by enforcement officers inside and outside of designated speed zones, the number of near misses of manatee-watercraft collisions observed, and the ten-year annual average number of watercraft-related manatee mortalities within one-half mile of the boundaries of the area patrolled by the increased law enforcement prior to and after implementation of increased law enforcement.

Providing Funds for Enforcement and/or Education to a Conservation Entity

Permit applicants for single family watercraft access projects generally do not have the knowledge or resources to complete individual agreements with law enforcement entities. In addition, the amount of funds contributed for one access point or even several small projects together is not conducive to implementing an effective enforcement program. The primary purpose of establishing a manatee conservation fund with a conservation organization is to provide single family applicants for watercraft access projects an efficient and effective means to reduce the impacts of their watercraft access facility on manatees.

While the resources to track an individual single family contribution to a specific law enforcement effort may exceed the cost of on-the-water enforcement, pooling such contributions will be more effective. The aggregation of many small contributions into one fund provides the ability to implement viable and effective enforcement programs in the area of impacts from single family watercraft access projects that could not be accomplished i ndi vi dual l y. However, application of the increased enforcement prior to completion of a given single family watercraft access project may not be assured in every case. The overall goal of the placement of these enforcement activities made possible by the pooled funds is to direct the activities in appropriate locations that ensure that the impacts of the projects are not likely to cause incidental take of manatees. Additionally, concentrated law enforcement events (e.g., weekend task forces) may provide one means to target areas with high rates of permit applications for single family watercraft access projects to ensure on-the-water enforcement is focused, to the maximum extent practicable, prior to the addition of watercraft to manatee habitat.

In order to contribute funds to a conservation organization, permit applicants for watercraft access projects other than single family applicants must meet the following prerequisites ensuring that incidental take from watercraft collisions is unlikely to occur as a result of their particular project: (1) adequate speed zones exist in the areas reasonably anticipated to have increased watercraft traffic as a result of the project; (2)

signage in these areas is adequate to ensure that boaters are aware of the speed zones; (3) speed zone enforcement in these areas is, or with project conservation measures will be, sufficient to prevent watercraft collisions from occurring as a result of the project; and (4) these measures must be in place or will be in place prior to project implementation. Again, if for whatever reason any of these conditions are not or cannot be satisfied in a particular area, then the Service cannot conclude that a project is not likely to adversely affect manatees.

The Service is working with the State, counties, local governments and conservation organizations to establish programs for use by permit applicants.

If an applicant elects to provide a conservation contribution as a conservation measure, the applicant must include in the proposed contribution any additional fees required to administratively manage the funds by the entity. contribution of funds must be transferred to the conservation entity prior to the Service's final determination on the proposed The agreement/contract between the entity that receives the funds from the applicant and the entity to which the funds are transferred for enforcement purposes must include information explaining how the funding will be used (e.g., how much the funding will increase the hours of enforcement on the water, or how much fuel or maintenance of watercraft will be supplied by the funding, or the amount and type of equipment to be supplied) and describe the area within which the funds will be used. agreement/contract must also include the reporting requirements identified in the previous section.

Again, based on the best scientific and commercial data available and as an interim measure only, the Service may find that a financial contribution from any applicant to an organization or entity that participates in and/or funds manatee conservation actions is consistent with the principles in these guidelines.

Implementation of Conservation Measures Where Inadequate Speed Zones Exist or Are Being Inadequately Enforced

Of the 14 Florida counties totally within high risk manatee areas, four counties currently have either no speed zones or only site-specific speed zones. Additionally, the Service considers many of the existing speed zones in portions of these 14 counties to be insufficient or inadequately enforced for the Service to concur with a determination that the project will not adversely affect manatees by contributing to incidental take through watercraft collisions. Within these counties, where speed zones are currently lacking or inadequate, it must be shown that appropriate speed zones are in place in the areas anticipated to be affected by the project, speed zone signage is adequate throughout these areas, and that adequate levels of speed zone enforcement will occur throughout these areas before the Service can determine that a proposed watercraft access facility is unlikely to cause incidental take of manatees.

These types of determinations will need to be made on a case-by-case basis based on the specific circumstances and conservation needs present in the area. If it is determined that the existing speed zones are not adequate to reduce incidental take to an unlikely to occur level or that the speed zones will not be adequately enforced even with conservation measures incorporated into the project design, the Service would not be able to conclude that the project is not likely to contribute to the incidental take of manatees through watercraft collisions.

Of the 15 counties with medium risk areas only, nine have county-wide (Nassau and St. Lucie) or site-specific (Flagler, Hernando, Lake, Levy, Pinellas, Putnam, and Seminole) speed zones. The remaining six medium risk counties (Dixie, Glades, Hendry, Pasco, Taylor, and Wakulla) have no enforceable speed zones. As with high risk counties, the Service will make case-by-case determinations as to whether a project is likely to contribute to the incidental take of manatees through watercraft collisions, in light of manatee mortality history and trends in the area, as well as any conservation measures incorporated into the project's design. In those areas where speed reduction is necessary yet no speed zones currently exist and/or speed zones will not be sufficiently enforced to render watercraft collisions in the affected area unlikely to occur (despite any conservation

measures incorporated into the project's design), we believe that we would not be able to concur with a determination that the project is not likely to result in the incidental take of manatees through watercraft collisions.

Since projects in low risk counties have no history of any watercraft-related manatee mortality, the Service will likely find that proposed projects in these areas are unlikely to contribute to the incidental take of manatees through watercraft collisions. As with any proposed project in manatee habitat, however, the Service will assess, on a case-by-case basis, whether any project is likely to result in incidental take through watercraft collisions or have any adverse effects on the species.

DETERMINING THE AMOUNT OF INCREASED LAW ENFORCEMENT HOURS NECESSARY

As stressed previously, in order to conclude that any project in high or medium risk counties will not contribute to incidental take of manatees through watercraft collisions, the Service must assess whether adequate speed zones in the affected areas exist and whether these speed zones are being, or will be (prior to project impacts), sufficiently enforced so that the project is unlikely to contribute to the incidental take of manatees through watercraft collisions. In making these determinations, the Service will rely on the best scientific and commercial data available (including, for example, manatee mortality data for a particular area, information regarding boater compliance with speed zones in the area, the anticipated beneficial effect of any conservation measures incorporated into a project's design, including the degree to which those measures are anticipated to increase speed zone enforcement in the area, etc.).

While recognizing the necessity for site-specific, case-by-case determinations, we are interested in reviewing alternative methods for assessing the adequacy of speed zone enforcement in manatee habitat, i.e., how the Service should analyze whether speed zone enforcement in a particular area is, or will be (in

light of any conservation measures incorporated into a project) sufficient to ensure that the incidental take of manatees through watercraft collisions do not occur as a result of new watercraft access projects in an area. Accordingly, we invite comments regarding such methods as well as any other features of this guidance document.

Application of this guidance will result in increased speed zone enforcement. These enforcement efforts will be directed to the areas where new access facilities are developed to assure that potential incidental take associated with the new watercraft access facility is unlikely to occur and thus incidental take exemption is not needed. This increased enforcement will emphasize laws and regulations that relate to manatee incidental take, whereas current enforcement activities are comprised of a broad suite of enforcement duties (e.g., fishing violations, no wake zone violations, safety violations) only some of which affect the incidental take of manatees. In addition to ensuring that the likelihood of incidental take related to new watercraft access is reduced to an unlikely to occur level, added enforcement in these areas will also serve to decrease the likelihood of incidental take from pre-existing watercraft acti vi ty.

We believe that law enforcement will control watercraft operator behavior to reduce effects to an unlikely to occur level until such time as the long-term strategy is finalized for manatee Proposing the guidance within this document as an conservation. interim strategy, the Service believes that up to ten years may be required to finalize this long-term conservation strategy. Therefore, we have established this ten-year guidance document as operating procedures until such time that the long-term conservation strategy for manatee conservation is implemented, such as the development of incidental take regulations under MMPA or the establishment of federally-designated manatee sanctuaries and refuges or the implementation of a statewide boater registration fee to support increased law enforcement. conducted the following analysis to determine the level of increased law enforcement necessary in high and medium risk areas to ensure that watercraft access projects will effectively

decrease to an unlikely to occur level the likelihood of incidental take associated with that project.

We calculated a recommended level of increased enforcement per watercraft access point in high-risk counties. Currently. Florida has a statewide average of one Florida Marine Patrol enforcement officer per 1,356 registered watercraft. number of work hours in a year given a 40-hour work week is Dividing this total number of work hours by 1,356 registered watercraft yields a current average of 1.5 hours of enforcement per registered watercraft per year. Because trends in watercraft-related manatee mortality continue to rise statewide, we believe that a conservation law enforcement level that exceeds this current average per registered watercraft, that is strategically applied to increase enforcement of manatee laws and regulations, and that extends over a ten-year period, is necessary to ensure that incidental take, due to additional watercraft gaining access through the project, will be unlikely The annual change in watercraft-related manatee mortality between 1990-1999 averaged more than nine percent. Therefore, in order for the project to not likely adversely affect and not likely cause the incidental take of manatees, we find that additional enforcement must be provided at a level of the current statewide average plus ten percent (1.65 hours) per watercraft provided access per year for ten years. applicants establishing an agreement directly with a law enforcement entity, the agreement must indicate the total number of enforcement hours (number of watercraft access points x 1.65 hours) for the ten-year period necessary to ensure that incidental take is unlikely to occur.

For single family applicants contributing funds to a conservation entity, the contribution amount must be sufficient to provide 1.65 hours of enforcement per year for the ten-year period necessary to ensure that incidental take is unlikely to occur. Again, based on the best scientific and commercial data available and as an interim measure only, the Service may find that a financial contribution from any applicant to an organization or entity that participates in and/or funds manatee conservation actions is consistent with the principles in these guidelines.

The current ratio of one law enforcement officer per 1,356 registered watercraft is a statewide average and not a site-specific ratio. Applying this ten percent increase in law enforcement above the current statewide average will result in an enforcement increase by a ratio of one officer per 1,261 watercraft, a 110 percent increase over the current level of State law enforcement, within the area likely to be affected by the watercraft access facility, assuming that State law enforcement levels remain the same. At this time, the Service does not have any information to indicate that such law enforcement level will increase or decrease.

Nonetheless, as stressed previously, in order to conclude that any project in high or medium risk counties will not contribute to incidental take of manatees through watercraft collisions, the Service must assess whether adequate speed zones in the affected areas exist and whether these speed zones are being, or will be (prior to project impacts), sufficiently enforced so that the project is unlikely to contribute to the incidental take of manatees through watercraft collisions.

We are considering alternate methods of determining the appropriate level of increased law enforcement necessary per watercraft access. One such method would involve calculating a relative risk ratio for discrete geographic areas such as Such a ratio might be calculated based on the number of manatees that summer or winter in the area, the number of registered watercraft in the area, and the average annual mortality in the area. By calculating such a risk ratio, we could determine the law enforcement level to be recommended in current high mortality areas relative to law the enforcement levels in areas where mortality is currently low. We currently do not have manatee abundance data for each county that would allow us to calculate such a risk ratio. We also are unaware of data that would allow us to account for the effect of watercraft registered in other states and brought into Florida waters. invite your comments on the use of the current statewide average enforcement ratio plus ten percent, and on the potential use of relative risk areas in determining the appropriate level of

increased enforcement necessary per watercraft access. We also invite suggestions on any other equitable method of determining an appropriate law enforcement level.

Based upon comments received, we may choose to modify the guidance on the appropriate level of increased enforcement necessary per watercraft access. Nonetheless, this document reflects the level of law enforcement the Service currently finds to be adequate based on the best scientific and commercial data available to reduce incidental take of manatees to the point that it is unlikely to occur with respect to new watercraft access facilities. We will continue to monitor manatee mortality in these high risk areas to ascertain if the recommended law enforcement level of 1.65 hours of enforcement per watercraft access per year is sufficient or necessary to ensure that incidental take is unlikely to occur as a result of the increased access from that facility. We will amend this guidance in the future if this level of law enforcement improves or is insufficient. Factors that may influence the law enforcement level may include: watercraft-related mortality numbers and trends; manatee population trends; law enforcement events, amount and extent of speed zones; and designation of sanctuaries. Service will ensure that any change to the recommended law enforcement level is based on the most current scientific information available.

If the proposed conservation measure in a high mortality risk county involves providing equipment or training to law enforcement officers, the amount of equipment or training to be provided must be equal in conservation value to 1.65 hours of enforcement per watercraft that is provided access per year over a ten-year period.

Medium risk areas, based on manatee mortality data, experience approximately ten percent of the total manatee mortality that is measured in high risk areas. Given the reduced degree of risk associated with medium risk areas, ten percent of the high risk area law enforcement effort is needed to reduce indirect effects to the point that the facility is unlikely to cause incidental take of manatees or adversely effect critical habitat. Based on

this percentage, a project should incorporate, for each watercraft that is provided access, 0.16 hour of enforcement per year over a ten-year period. This ten percent change applies equally to funds contributed to a conservation entity, i.e., the contribution amount from single family applicants must be sufficient to provide 0.16 hour of enforcement per year for the ten-year period necessary to ensure that incidental take is unlikely to occur.

If it is determined that means other than increasing law enforcement hours on the water may be an appropriate conservation measure in a medium risk county, the alternate means should be comparable in value to 0.16 hours of enforcement per year over the ten-year period.

Low risk areas represent the extended summer, or warm season, manatee range. In low risk areas, there is no documented watercraft-related mortality and, at this time, we believe that the potential for incidental take from watercraft is unlikely to occur. Thus, we do not believe that in these areas conservation measures included as part of a proposed watercraft access facility will be necessary to come to a not likely to adversely affect determination. However, any project that would incorporate such conservation efforts would contribute to overall manatee recovery and such incorporation of measures is encouraged.

PROGRAM MONITORING AND EVALUATION

The effectiveness of this guidance will be evaluated on a continuing basis by comparing watercraft-related manatee mortality data in areas where law enforcement has been increased to previous rates of mortality. Although review of program implementation and evaluation of manatee mortality and injury are continuous processes, the manatee mortality risk areas will be assessed at one-year intervals after implementation of this guidance. If the Service determines at any time that this interim strategy is not meeting its intended objectives, then it will be altered, suspended, or revoked until corrections can be made to rectify the situation. Monitoring implementation and

effectiveness will determine the need to continue, to extend the scope of, to change elements of, and/or to add new components to the guidance. The Service will have a lead position that will be responsible for monitoring and accounting in coordination with the Manatee Recovery Team and all facilities that implement this guidance. Records and databases maintained by the Service can be reviewed by the public upon request. Table One of the Guidance, which reflects the high, medium, and low risk areas, will be revised based annually on current mortality data.

LONG-TERM CONSERVATION STRATEGY

Enforcement continues to be validated as an effective means of conserving the manatee by reduction in adult mortality. However, a larger program than that provided by this interim strategy is necessary to address existing watercraft-related mortality. Such a program has not been developed and we are currently working with various entities to accomplish this goal through an incidental take regulation under the MMPA. Concurrently, we are working with all partners to ensure speed zone placement and enforcement is both appropriate and adequate.

We encourage the State of Florida, Corps of Engineers, or other Federal, tribal, local, and private entities to seek incidental take authorization for their activities that are likely to cause the incidental take of manatees as defined under the ESA and MMPA, instead of addressing access developments one by one through the use of this interim strategy. Incidental take may be authorized under the MMPA if the Service finds that incidental take associated with the requester's activity, after taking into account all measures committed to by the requester to reduce the affect of the activity, will have a negligible impact on Incidental take can be exempted under the ESA only upon completion of authorization under the MMPA. The MMPA incidental take regulation process requires compliance with the National Environmental Policy Act and public comment and review. The result of this rulemaking process would be to address incidental take under the MMPA and the ESA in the process of recovering the manatee. The final Manatee Recovery Plan is expected to support both the interim strategy and this long term

rulemaking process and provide additional guidance if deemed appropriate by the Service and the Manatee Recovery Team.

Public Comments Solicited

We are seeking information, views, and opinions from the public related to this interim strategy, the supporting analyses, and proposed implementation. We will consider all comments received by the date specified above.

Authority

The authority for this action is section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)

Dated:	(12/18/00)	
Si gned:	/s/	
8	Sam D. Hamilton	